



FCC Broadband Mapping Analysis and Reporting for the Deep East Texas Region

On November 18, 2022, the Federal Communications Commission (FCC) released its updated national Broadband Map to help the public identify the availability and location of where broadband internet access exists across residential broadband serviceable locations (“BSL’s”) Described as a “a significant step forward” from earlier maps based on Form 477 date filed by service providers, the release began a review and challenge process that closed on January 13, 2023.

The process included two types of challenges. Location (broadband serviceable local fabric) based that pertain to inaccurate or missing customer location information on the FCC’s broadband map or availability that pertain to a lack of service at a customer’s residential location.

As directed by the Infrastructure Investment and Jobs Act of 2021 (“IIJA”), the FCC’s broadband maps will be used by the National Telecommunications Information Administration (NTIA) to distribute over \$48.2 Billion to all fifty states and territories for broadband infrastructure and digital equity projects. For a state like Texas that encompass nearly 10 percent of the national population and over eight percent of the nation’s rural population, any error in the FCC’s map would penalize the state’s allocation of funds needed to close the connectivity gap in rural local income communities.



DETCOG team helping local residents in rural San Jacinto County find their homes on the FCC’s public facing map.

The state of Texas chose not to directly challenge the FCC maps, but instead encouraged consumers and local communities to file challenges on their own.¹

¹ Flahive, Paul, “State office may not challenge broadband maps, risking hundreds of millions of federal funds for Texas,” Texas Public Radio, Dec. 20, 2022, (<https://www.tpr.org/government-politics/2022-12-20/state-office-may-not-challenge-broadband-maps-risking-hundreds-of-millions-of-federal-funds-for-texas>) (Accessed Jan. 17, 2023)

As a result, the TLL Temple Foundation approached the Deep East Texas Council of Governments (DETCOG) to gauge the accuracy of the map on a regional level. With financial support from the Foundation, DETCOG in mid-December developed a plan to implement a region wide broadband mapping evaluation and validation effort to ensure Deep East Texas households were accurately reported to the FCC under the broadband challenge process.

Between Christmas and New Year's day, DETCOG identified staff and locations to conduct community outreach and broadband mapping workshops to assist citizens in verifying mapping information, filing individual challenges where appropriate, and collecting data to support a regional bulk fabric and fixed availability challenge. With more than twenty sites across eleven counties, the DETCOG staff developed a regional workshop schedule to reach each community in East Texas.

Magellan Advisors, a nationally recognized broadband engineering and business planning firm, was simultaneously contracted to provide a broader geospatial analysis to target potential problem areas for the new map and to assist with documentation collection to support the final filing.

Boots hit the ground on January 6 in Shelby County, where the DETCOG team hosted sessions in three separate communities to guide over seventy households to find their locations on the FCC map and, as needed, to file individual challenges. Over five working days, two separate teams completed 24 events across the region.

DATE	TIME	COUNTY	SITE	ADDRESS	LOCATION	ZIP
1/5	9:30	Shelby	Timpson City Hall	456 Jacobs St.	Timpson	75975
1/5	12:00	Shelby	Tenaha City Hall	238 N. George Bowers Dr.	Tenaha	75974
1/5	2:30	Shelby	Windham Civic Center Foyer	146 Express Blvd.	Center	75935
1/6	8:30	San Augustine	San Augustine Co. Expo Rodeo Center	1109 Oaklawn St	San Augustine	75972
1/6	2:00	Sabine	Sabean's Coffee & Creamery	105 N. Oak St	Hemphill	75948
1/9	9:30	Tyler	Nutrition Center	201 Veterans Way	Woodville	75979
1/9	10:00	Houston	Moosehead Café	412 E. Houston Ave	Crockett	75835
1/9	12:00	Houston	Tabernacle of Praise	170 TX-7	Kennard	75847
1/9	1:00	Tyler	Spurger Fire Department	111 Co Rd 4433	Spurger	77660
1/10	9:30	Polk	Dunbar Gym	1103 Dunbar St	Livingston	77351
1/10	11:30	Trinity	Apple Springs Senior Center	15840 TX-94	Apple Springs	75926
1/10	1:30	Polk	Corrigan Library	604 S Matthews	Corrigan	75939
1/10	5:30	Houston	First Baptist Church	210 Read St.	Lovelady	75851
1/11	9:00	San Jacinto	Shepherd Community Center	10251 TX 150	Shepherd	77371
1/11	11:00	San Jacinto	Coldspring Community	101 E Cedar Ave	Coldspring	77331
1/11	1:30	San Jacinto	San Jacinto Co. Precinct 4 Office	221 Boat Launch Rd	Point Blank	77364
1/11	9:30	Angelina	Angelina Chamber of Commerce	1615 S Chestnut	Lufkin	75901
1/11	1:30:	Angelina	M&J's Café	205 N Temple Dr	Diboll	75941
1/11	4:00	Angelina	Huntington City Hall	802 US-69	Huntington	75949
1/12	9:30	Nacogdoches	Nacogdoches Chamber of Commerce	2516 North Street	Nacogdoches	75965
1/12	9:30	Newton	Iris & Annie Howard Civic Center	213 Court St	Newton	75966
1/12	1:30	Nacogdoches	Chireno Café	716 Main	Chireno	75937
1/12	3:30	Nacogdoches	Garrison Volunteer Fire Dept.	364 S. B Ave	Garrison	75946

All participants were guided through the individual challenge process based on their experience and location relative to the data in the mapping portal. In total, over 435 homes were reviewed during all sessions. As the individual responses were collected, DETCOG staff assembled and analyzed the data and prepared it for the bulk file submission into the FCC's broadband data collection portal.

Magellan Advisors conducted extensive geospatial mapping analysis of the entire DETCOG region to assist the regional field effort and help DETCOG staff engage local consumers in areas listed as having fiber capacity on the FCC's public facing map as well as in the location fabric. Magellan's broadband team downloaded and matched the FCC's fabric files for the DETCOG counties with the location records of each household listed in the broadband map.

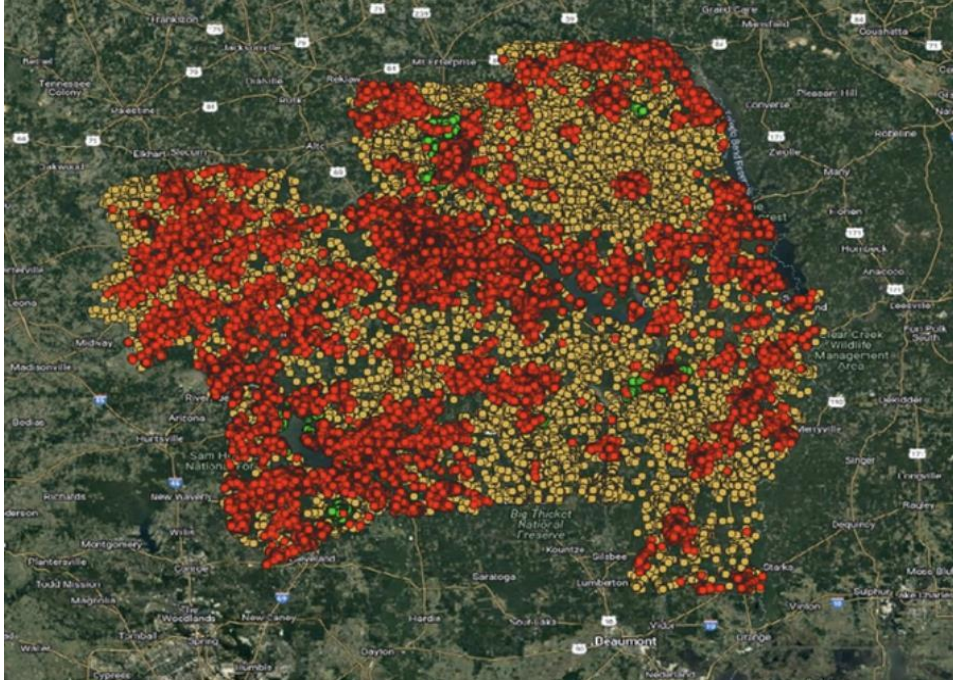
This matching exercise was the first step in assisting DETCOG with their location and availability outreach and discussions with local consumers. Magellan also identified numerous areas where fiber availability was questionable based on Google earth images when compared with the fabric data depicted below.

Key Findings

Of the 435 sites reviewed, location challenges were filed for 115 rural households throughout East Texas. **Over 26 percent of the homeowners interviewed during DETCOG's outreach and consumer education efforts were either missing from the fabric file or in the wrong location.** If spread similarly throughout Deep East Texas, these results indicate an undercount of almost 32,000 households in our 11 rural counties alone. With over 9.9 million households throughout Texas, 26 percent statewide would be more than 2.5 million households that are either not on the FCC map or incorrectly listed.

As the NTIA will not be using satellite services in their calculations, we did not collect data for these services. However, consumer concerns concerning HughesNet's service availability and quality was a common theme in each workshop. Many consumers indicated that HughesNet offers services well below 10 Mbps downlink, making it difficult to stream or to have multiple students working on computers simultaneously.

Data caps and spotty coverage was another concern raised among satellite users. Most existing satellite subscribers were supportive of the Starlink service but were unable to afford it. Other areas made questionable by satellite imagery were also questionable when more closely examined.



Above is a screenshot of the FCC's fabric data mapped in QGIS that depicts the households in the DETCOG region that have copper/DSL service (identified in red). The entire region should be covered with copper/DSL service which is the precursor to fiber deployments. However, as the map above shows, only portions of the region are colored in red. Therefore, existing DSL providers either misreported or do not provide any service to the households colored in orange which indicate that the household receives no broadband or DSL service.





DETCOG conducted field outreach in areas marked on the FCC maps as being served with one or more broadband providers were not served based on photos taken at those locations listed on the map. The photos above indicate that fiber facilities do not exist in these areas, despite the FCC maps suggesting they do. lacking in hard evidence. These neighborhoods, for instance, only show traditional telephone and cable connections.

The Challenge Process

DETCOG experienced significant barriers in submitting the data and evidence collected into the FCC's Broadband data collection mapping portal for a bulk fixed and availability challenge. The process of ensuring the CSV files would be accepted in the portal took several days and countless attempts despite being aligned with the data specifications required for upload. DETCOG staff worked closely with numerous data science specialists to trouble shoot the file format. The FCC's data specifications documents were not helpful and did not provide the necessary detail needed for local community-based stakeholders to complete the process successfully by the January 13, 2023, deadline. As a result of the restrictive nature of the data specifications requirements, DETCOG had to delete roughly 20 customer records from its bulk fabric challenge file since many did not have email addresses largely because they do not have internet access at their home. Other addresses were mistakenly rejected by the system because the portal did not accept TX as a valid state abbreviation.

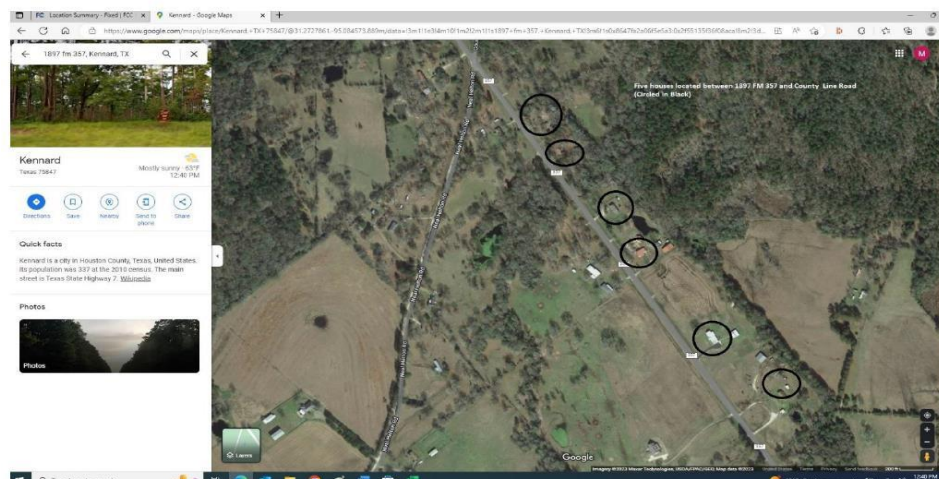
Multiple county roads were named incorrectly on the map and in the fabric and several residential addresses were completely missing. To prove that a Broadband Serviceable Location (BSL) existed, DETCOG staff uploaded screen shots from Google Earth its in challenge file. In instances where consumer locations (BSL's) were not listed on the map or in the fabric, DETCOG staff conducted field outreach to take photos of the location.

On the bulk file submission for the fabric challenge, any error in any field prevented the entire file from successfully being uploaded into the FCC's BDC portal. For example, if a 75-year-old rural resident with no internet or email service failed to input an email address, the entire file was rejected. As a result, DETCOG was forced to eliminate over twenty records from the file to achieve a successful upload.

Location Challenge

Terri Gose, 1897 FM 357, Kennard, TX

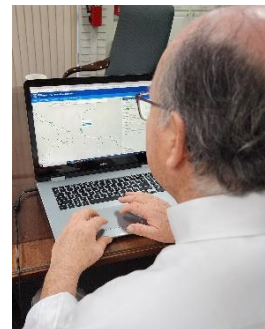
Missing houses



In this Google satellite image in Houston County, the homeowner identified five adjacent homes that were not on the map.

Due to the extraordinary difficulties experienced by DETCOG staff in getting the fabric challenge file to upload successfully, the team was unable to submit the file until midnight, on Saturday, January 14, 2023. The file included 134 pages of evidentiary records from consumers as well as screenshots of each individual challenge, news articles from local press about the process and press releases from county leaders throughout the DETCOG region.

DETCOG Executive Director Lonnie Hunt introduces homeowners in Nacogdoches County to the review process.



DETCOG teams deployed across Deep East Texas communities to guide rural consumers in the region through the FCC review and individual challenge process.

For more information or for a redacted version of the collected evidence contact:

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Appendix

Local and Regional News Articles Regarding the FCC Mapping Process and DETCOG's engagement.

THE MESSENGER (NEWSPAPER BASED IN GRAPELAND, HOUSTON COUNTY, TEX

[GOVERNMENT](#) | [LOCAL NEWS](#)

DETCOG Meets with County Residents to Improve Rural Internet

By [Greg Ritchie](#) January 12, 2023



By Greg Ritchie

Messenger Reporter

HOUSTON COUNTY – Deep East Texas Council of Governments (DETCOG) held informal get-togethers with residents to confirm information to be sent to the federal government to increase funding for rural internet connections across Houston County.

The group met with residents in Crockett, Kennard, Apple Springs and Lovelady asking locals to confirm simple information to be compared to a national database used to fund rural communities.

Mickey Slimp is DETCOG's Broadband Project Manager and led the information gatherings hoping to secure a bigger piece of federal funding for areas of East Texas where more investment needs to be made in broadband infrastructure.

"The Federal Communications Commission (FCC) has put out a map they're going to use for broadband all over the country," Slimp explained. "And the goal in theory is to connect every house in the country to broadband. They're going to look at every house and what kind of connection they have. If they don't have a good connection right now, they will send money to the state of Texas to get that house connected."

Slimp said confirming the information on maps made in distant Washington was where the public could help confirm the information.

"We have looked at the maps. They're better than they used to be. They've done some work on it, but they still have a lot of gaps. And so we want Texas to get all the money it needs to improve these connections."

Slimp said the project involves around \$40 billion and hope Texas will be able to secure at least \$3 billion for rural internet. His goal was to get 10-15 corrections noted at each informal meeting to total a couple hundred in all to present to the FCC.

Houston County Electric Cooperative's (HCEC) Kathi Calvert was on hand to assist with interviews and promote the event. Calvert said the effort was organized quickly since the team was on a tight deadline.

"There's a very tight deadline. The maps were published right around the holidays and we have to review and dispute any issues by January 13," Calvert said. "And this drives all the federal funding for this area and we are severely underserved. So we're scrambling trying to make sure that we have access to funding in the future, whether it's through our state broadband office or

through federal funds to make sure our residents here in East Texas get high speed internet coverage.”



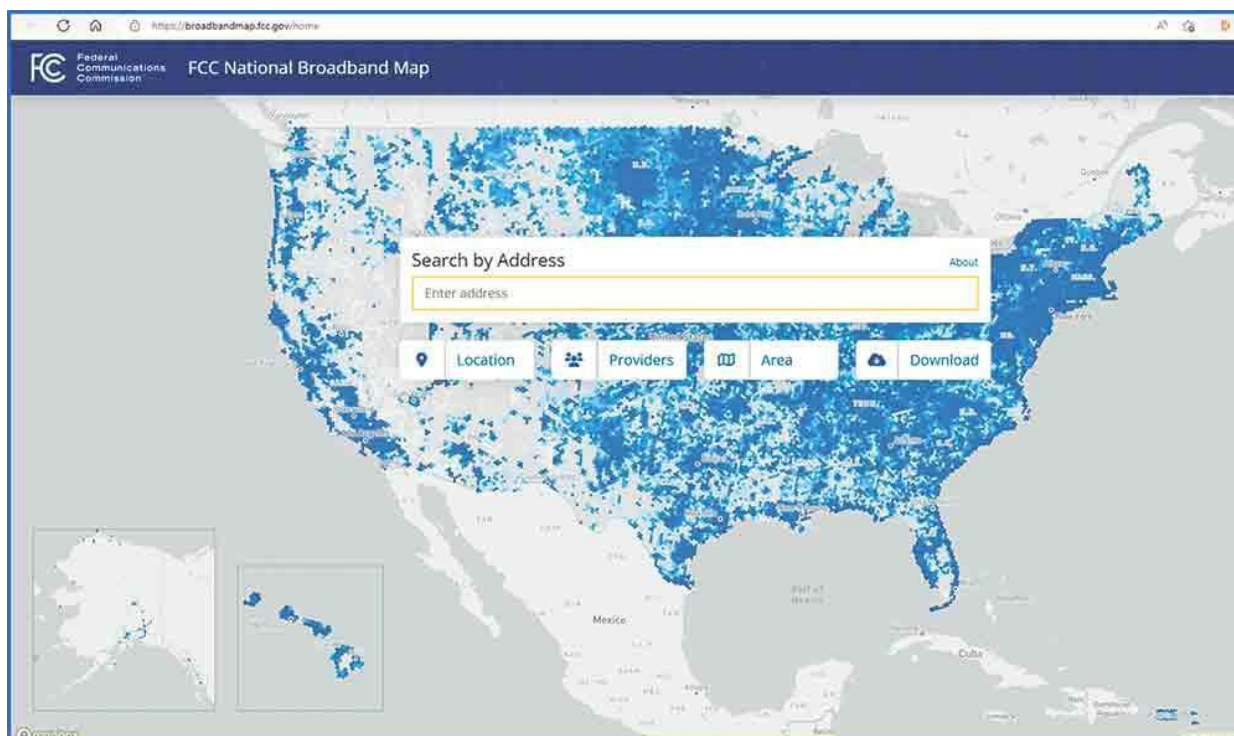
Houston County Electric Co-Op’s Kathi Calvert assists DETCOG confirming addresses of local and rural residents as they try to secure more funding to improve broadband internet service in East Texas.

Greg Ritchie can be reached at greg@messenger-news.com
SAN JACINTO COUNTY NEWS

Residents asked to verify FCC map

 [Write a comment](#)

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Special to the News-Times

LUFKIN — The Federal Communications Commission recently released a map showing what it believes are the types and speeds of internet service available to every household in Deep East Texas.

The map was built with information from the internet providers, including those in our region.

Rural leaders from throughout Texas have voiced concerns that the map exaggerates the actual service that is available to Texans, especially those in rural communities. There is a process for individual households and communities to challenge the map data, and the Deep East Texas Council of Governments is urging residents to look at the map and report inaccuracies.

DETCOG is working on a region-wide bulk challenge; however, the individual household challenges are an important part of this process.

The verification is important in that more than \$40 billion from the federal government will soon be sent to states to expand internet connections. The new FCC map will

determine how that money is allocated among the states, with funding allocated based on the number of unconnected homes on the map.

DETCOG's goal is to help ensure the State of Texas receives its fair share of this funding. If only 1 percent of the map is inaccurate, 100,000 or more Texas homes could remain unserved. The problem is thought to be even greater in rural areas, where some estimates are that the inaccuracies may be as high as 25 percent. In Deep East Texas that could equate to more than 31,000 homes. The timeline to participate in the challenge process is short. The deadline for challenges is Jan. 13, 2023. The process requires household residents to review their addresses on the map and report, with evidence, any errors.

How to Submit a Challenge

To look at your residence on the map, go to: <https://broadbandmap.fcc.gov/home>. Households that do not have internet access can get help at your local library or use the wi-fi at a local fast-food restaurant. On the home page, you can place your address in the "search by address" window, which will show your location on the map. It will also show the internet providers at your home and the type of service each provides. Once an address is entered, the map will zoom in and show what has been reported as available:

The Texas Broadband Development Office has also provided more details on how to submit a challenge

at <https://comptroller.texas.gov/programs/broadband/communities/maps/fcc/>.

As many who most need the service may not be able to get onto the internet to complete the task, you may contact DETCOG at (936) 634-2247 for help.

Challenges can be based on several basis, including that the provider denied a request for service, demanded excessive connection fees or failed to schedule an installation within 10 business days of a request. Once a challenge is filed, providers are required to review the challenge and either concede or dispute it within 60 days.

Reasons you can submit an availability challenge as described by the Texas Broadband Office include:

- Provider failed to schedule a service installation within 10 business days of a request.
- Provider did not install the service at the agreed-upon time.
- Provider requested more than the standard installation fee to connect this location.
- Provider denied the request for service.
- Provider does not offer the technology or service type at this location.

- Reported speed is not available for purchase.
- Subscribed speed is not achievable. (Individuals only can select this option (on the map), but it won't create a challenge.)
- No wireless signal is available at this location.
- New, non-standard equipment is required to connect this location.

If one of the services listed is not actually offered to the selected location, or if the providers listed do not actually serve your location, you can submit an availability challenge.

- December 30, 2022

State agency may not question broadband cards, risking hundreds of millions of federal funds for Tex

Karine Delafosse January 12, 2023



Paul Flahive | Texas Public Radio

Billions of dollars are available next month to expand broadband availability across the country. But the maps that determine where the money goes are inaccurate because internet service providers have inflated their coverage areas, according to the Texas comptroller.

The Texas bureau tasked with challenging and improving these cards at the state level says it can't. And that could leave hundreds of millions of dollars on the table that should have gone towards expanding broadband in underserved areas.

In small cinder block community centers in deep east Texas, Lonnie Hunt has preached the gospel of broadband and how it can save the small town of Texas.

"I don't think I need to say this, but why do we need broadband? Because we can't survive without it in the future," Hunt told a group in Corrigan, Texas, in 2019.

Also read: [The state agency must not question broadband cards and risk hundreds of millions of federal funds to Texas](#)

Hunt — a former district judge — heads the Deep East Texas Council of Governments (DETCOG), a mostly rural region nestled in the pine forests of East Texas.

It's rich in scenic beauty and small-town charm, but poor in good internet service.

For four years, Hunt and his team have spent countless hours traveling across the region and into Austin campaigning for broadband funds and preparing for the moment when the government finally decides to pour money into expansion.

The Biden administration's \$42.5 billion broadband infrastructure bill is that moment.

"This is the big pot at the end of the rainbow, we hope it's ready to go online," he said in an interview this month.

But Hunt and other broadband advocates were surprised when the state Broadband Development Office's November newsletter said it wouldn't challenge the current broadband cards and would instead urge communities to do so — potentially saving the state hundreds of millions through broadband equity Access would cost and deployment program (BEAD).

Many proponents discussed the issue with TPR, describing it as an about-face that will leave unprepared communities to fill the gap for the state in the 11th hour.

"Well, it's disappointing and frustrating. And honestly, I don't get it," Hunt said.

The Broadband Development Office was established under the Comptroller in 2021. The office is statutorily charged with questioning the FCC broadband cards. But the November newsletter — the day the federal government released its new maps — said it couldn't.

According to the BDO, that's not possible because Lightbox — the company that paid millions to map Texas and find out at a granular level what availability is like across the state — hasn't reached an agreement with the FCC.

"The issue at hand is really unrelated to Lightbox," said Eric Frank, Lightbox CEO.

Frank said his company did its job, but Texas couldn't release the data to the FCC if CostQuest, the agency's federal contractor, could use it commercially and give its competitor free labor and intellectual property.

If they did, it would hurt hundreds of companies like his that were doing this work for states and communities.

"I mean, why would a data provider that's spending money, building intellectual property, making a product that's giving away? Are you going to ask Sony to give away their film archive?" Frank asked.

CostQuest explained in a statement to TPR that everyone should have known about the challenge rules since they were originally adopted in 2020. It said it would use challenge data to update the FCC's national broadband map but didn't say if the data would be sold elsewhere.

"The fact that a party would approach a state to support a state's BEAD-powered broadband efforts and then fail to meet a state's needs seems to be the problem here," a spokeswoman for CostQuest said.

Lightbox isn't the only one to criticize the FCC's order. Texas is one of a handful of states in the same predicament — where the state doesn't own the data, it rents it, and companies don't see fit to do so.

The FCC did not respond to TPR's request for comment.

"This is a once-in-a-generation opportunity. And Harris County's inability to capitalize on a statewide challenge is a pressing concern," said John Speirs, manager of the Harris County Office of Broadband.

DETCOG's Mickey Slimp worried that the challenge process might overwhelm many users. And it is believed that they have the internet to challenge the broadband cards. When he saw that the cards said he had fiber optic connection to the house, he tried to question it.

"The answer was basically, 'They have enough service here.' And that's about it. It wasn't about the accuracy of the map, it was about the serviceability," he said.

The comptroller sent a letter to the federal government insisting they had an additional 60 days to contest the cards. He said ISPs are inflating their availability and it's hurting communities.

Without better maps, the same communities already caught in the access gap will be hit again.

"This is something that will disproportionately impact communities that have already experienced the digital divide and have historically been excluded from funding allocations," Speirs said.

Speirs said communities need to challenge the cards themselves, but they're unlikely to replace the nationwide effort. The appeal process is complex and the federal government gave them less than two months to do it – two months that include three recognized holidays.

"This is a difficult task in an extremely short amount of time," said a letter sent by City of San Antonio officials to elected officials.

The letter encouraged elected leaders to get behind the extension motion as it collects more data for its own mass challenge from the city and county. It's also launching a website that will guide people through the process to challenge the cards.

In his letter, Comptroller Hegar — who did not respond to TPR's request for comment — made no mention of the data trove that Texas paid for and is not currently being used to address the impasse issue.

"Regardless of this impasse, the federal, state and local governments are accountable to our residents. And we're accountable to the people," Speirs said.